



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,576	11/09/2001	Robert J. Greenberg	S100-DIV3	8383
28284	7590	10/04/2010		
SECOND SIGHT MEDICAL PRODUCTS, INC. 12744 SAN FERNANDO ROAD BUILDING 3 SYLMAR, CA 91342			EXAMINER OROPEZA, FRANCES P	
			ART UNIT 3766	PAPER NUMBER
			NOTIFICATION DATE 10/04/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

SCOTT@2-SIGHT.COM

REVANS@2-SIGHT.COM

### Office Action Summary

**Application No.**

10/033,576

**Applicant(s)**

GREENBERG ET AL.

**Examiner**

FRANCES P. OROPEZA

**Art Unit**

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/18/10 (Amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 271, 332-337 and 340 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 271, 332-337 and 340 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/18/10 has been entered.

### ***Response***

2. The Applicant amended independent claim 271 in the response filed 8/18/09, hence the rejection of record is withdrawn and a new rejection established in the subsequent paragraphs.

### ***Claim Rejection – 35 USC 112***

3. Claims 271, 332-337 and 340 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner is unable to find in the instant specification the limitation of claim 271 : "said at least one electrodes within a void have a common polarity". The claimed invention is understood to be shown in figures 10b, 10c, 10d, 11b, 11c and 11d. The cited figures are discussed on pages 22-23 and 24-25. A single electrode is shown in each figure. The figures contain no notation indicative of electrode polarity. When referencing the cited

specification on pages 22-25, there is no discussion of polarity and no discussion about more than one electrode in each void. New matter may not be entered at this point in the prosecution. Appropriate correction is required.

The Applicant's arguments filed 3/18/10 have been fully considered, but they are not convincing.

The Applicant seeks to justify amendments to the independent claim 271 to claim more than one electrode in a void, and a common polarity between multiple electrodes. As discussed above, the Examiner is unable to find in the instant specification the limitations of "said at least one electrodes within a void have a common polarity". The claimed invention is understood to be shown in figures 10b, 10c, 10d, 11b, 11c and 11d. A single electrode is shown in each figure. The figures contain no notation indicative of electrode polarity. The cited figures are discussed on pages 22-23 and 24-25 of the specification. When referencing the cited specification on pages 22-25, there is no discussion of polarity and no discussion about more than one electrode in each recess/void.

***Claim Rejections - 35 USC 103***

4. Claims 271, 332 and 340 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,109,844 to de Juan, Jr. et al., hereafter de Juan, in view of U.S. Patent No. 6,230,057 to Chow et al., hereafter Chow.

de Juan substantially discloses the instant invention, a device comprising an electrode array (micro-stimulator - figure 5 - 50) with insulation (figures 1, 3 - 35), voids and a plurality of electrodes (figure 3 - 24, 31) recessed and exposed in more than one dimension, the x and y planes, to stimulate retinal cells (figures 1, 2, 3, 5; column 4, lines 25-27; column 5, lines 63-68). de Juan discussing connecting ground electrodes with appropriate stimulation electrodes, but does not discuss polarity.

As discussed in the previous paragraph of this action, de Juan discloses the claimed invention except the electrodes within the void having a common polarity.

Chow teaches electrical stimulation using electrodes with appropriate polarity for the purpose of effectively stimulating the patient's vision to accurately convey the percept. Chow teaches both electrode polarities are required when one seeks to create a percept that is anything but all light or all dark. In an all light or all dark scenario, the electrodes would have a common polarity. It would have been obvious to one having ordinary skill in the art at the time of the invention to have used electrodes within the void having a common polarity in the de Juan system in order use a stimulation configuration proven to produce all dark or all light percepts (column 20, lines 53-67; column 21, lines 20-59).

5. Claims 333-337 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,109,844 to de Juan, Jr. et al., hereafter de Juan, and U.S. Patent No. 6,230,057 to Chow et al., hereafter Chow, in view of U.S. Patent No. 4,969,468 to Byers et al., hereafter Byers.

As discussed in paragraph 4 of this action, modified de Juan discloses the claimed invention except:

- the plurality of electrodes having different lengths (claim 333),
- the plurality of electrodes having a spike-shaped (claim 334),
- an integrated circuit (claim 335),
- the array body having a generally curved surface on at least one side (claim 336), and
- the electrodes being metal and at least partially coated in ceramic (claim 337).

Byers teaches electrode array configurations using a plurality of spike-shaped electrodes (Figure 6 - 12, 13; Figure 11 - 31, 32) being metal and at least partially coated in ceramic (Figure 7; column 6, lines 63-68), and having different lengths (Figure 11 - 31, 32), the electrode array body comprising an integrated circuit (Figure 6 - 7; column 10, lines 29-30; Figure 12 - 33-38; column 7, lines 63-66), and having a generally curved surface on at least one side (column 10, lines 17-20) for the purpose of having optimally designed metal electrodes whose spiked-shape, varying lengths, and ceramic coating allows the stimulation to be directed toward the targeted tissue in the retina for the purpose of creating a focus electrical stimulus, the electrode stimuli optimally controlled with proven control technology, an integrated circuit, and the array body having a generally curved-shaped body to conform to the retina to effectively and optimally contact and stimulate the retinal tissue. It would have been obvious to one having ordinary skill in the art at the time of the invention to have used a plurality of spike-shaped metal electrodes, at least partially coated in ceramic and having different lengths, and an electrode array body comprising an integrated circuit and having a generally curved surface on at least one side in the modified de Juan system in order to customize the stimulation device for the specific

patient needs so stimulation of the retina tissue in that specific location enables the patient to gain an optimal degree of sight while not penetrating the retinal basement membrane at the surface of the retina, hence avoiding mechanical damage to the cells of the retina and the ganglion cells at the surface thereof (column 1, line 67 - column 2, line 2; column 2, lines 10-13).

### ***Specification***

6. The amendment filed 8/18/09 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Claim 271 - "said at least one electrode within a void have a common polarity". Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Statutory Basis***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fran Oropeza whose telephone number is (571) 272-4953. Fran's schedule typically is Monday and Tuesday 9AM-7PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl H. Layno can be reached on (571) 272-4949. Carl's schedule typically is Monday, Wednesday, Friday 9AM-5 PM EST; Tuesday, Thursday 9AM-3PM and 9PM- 11 PM EST. The fax phone numbers for

the organization where this application or proceeding is assigned is (571) 273-8300 for regular communication and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Frances P. Oropeza/  
Patent Examiner, Art Unit 3766  
September 27, 2010

/Carl H. Layno/  
Supervisory Patent Examiner, Art Unit 3766